REMARKS

Reconsideration is requested.

Claims 45-56 are pending. Claims 1-44 have been canceled, without prejudice.

Claim 56 has been withdrawn from consideration. Rejoinder and allowance of claim 56, which is a method dependent on the product claim 45, are requested once an allowable product claim is identified.

The Examiner is requested to return a completely-initialed copy of the PTO-1449 Form bearing the OIPE stamp of March 3, 2004. Specifically, a partially-initialed copy of the PTO-1449 Form was received with the Office Action of July 14, 2005. The partially-initialed copy of the PTO-1449 Form does not include however the Examiner's initials in the left-hand column next to reference no. 154 (EP 0463848) and reference no.153 (UK 2239245). A completely-initialed copy of the previously-filed PTO-1449 Form is requested.

The Examiner is also requested to confirm that all of the certified copies of the priority documents have been received in parent application Serial No. 08/362,455 as the Office Action of July 14, 2005 indicates that certified copies of the priority documents have been received in Application No. 08/362,455 however the Office Action does not indicate that all certified copies have been received.

Claim 45 has been amended above to obviate the Section 112, second paragraph, rejection of claims 45-55. Entry of the amendment and withdrawal of the rejection are requested. The applicants have amended claim 45 as suggested in the Examiner's latter stated interpretation of the unamended claim 45. The applicants submit, with due respect, that one of ordinary skill would appreciate that the unamended

claim defines an isolated antibody, as opposed to the complex described by the Examiner. This will be clear from the recitation "An isolated HCV antibody". Entry of the amendment however is requested to advance prosecution, without prejudice, by obviating the Section 112, second paragraph, rejection of claims 45-55.

The Section 112, first paragraph "written description", rejection of claims 45-55 is traversed. Reconsideration and withdrawal of the rejection are requested in view of the following comments.

The Examiner is understood to assert that the specification fails to describe Core antigens from positions 140-191 with adequate precision for one of ordinary skill to conclude that the applicants were "in possession of a range of antigens from this specific region." See page 3 of the Office Action of July 14, 2005.

The Examiner is requested to see however, for example, the disclosure of the specification relating to SEQ ID NOs.: 14, 16, 18, 20, 22, 24, 26 or 28. Specifically, on page 38, lines 11-15, the specification describes portions "...in the region spanning positions 140 to 391 in the Core/E1 region..." (emphasis added) and on page 38, lines 16-20, the specification describes portions "...in the region spanning positions 192 to 391 in the E1 region..." (emphasis added). One of ordinary skill in the art will appreciate from at least this disclosure, as well as the whole of the disclosure, that the applicants have described their invention as including sequences in the Core region which span positions 140 to 191, as recited in claims 45 and 46.

The Examiner is urged to appreciate that an advantage of antibodies reacting to HCV type-specific antigens is disclosed on page 44, lines 7-23 and page 45, lines 10-12

of the specification and relates to performing HCV serotyping (i.e., not just merely HCV detection) with such antibodies.

Withdrawal of the Section 112, first paragraph "written description", rejection of claims 45-55 is requested.

The Section 102 rejection of claims 45-48 and 51-55 over Chien (WO 93/00365) is traversed. Reconsideration and withdrawal of the rejection are requested in view of the following distinguishing comments.

The Examiner is understood to have ignored the recitation in the claims of a requirement that the claimed antibody specifically bind or specifically recognize a type 3a HCV antigen. Specifically, the Examiner asserts that the claimed antibody is the same as an antibody which binds to an antigen which lacks a genotype 3a-specific amino acid. See page 4 of the Office Action of July 14, 2005. The Examiner's interpretation of the claims however, which ignores specific recitations of the claims, is inappropriate.

Moreover, the Examiner's interpretation of the claimed antibodies which equates the same to antibodies which are

> "derived from non-genotype 3a antibodies ..capable of cross-reacting with a corresponding antigen having a genotype 3a-specific amino acid" (see page 5 of the Office Action dated July 14, 2005)

Is contrary to requirement of the claims that the claimed antibody "specifically" bind with a type 3a HCV antigen. Cross-reacting antibodies are not included in the definition of the claims as the same are not antibodies which specifically bind to a type 3a HCV antigen..

The Examiner may not ignore aspects of the claimed invention and an anticipatory reference must teach each and every aspect of the claimed invention. The cited art fails to teach, literally or inherently, each and every aspect of the claimed invention. Withdrawal of the Section 102 rejection is requested.

Chien fails to disclose or suggest an antibody which specifically binds to a type 3a HCV antigen. Chien fails to teach or suggest a type 3a HCV amino acid sequence and/or a type 3a HCV nucleic acid sequence. Chien fails to teach and/or suggest the delineation of specific any Core type 3a sequence. Indeed, such delineation requires, at least, an alignment of HCV sequences in order to define such antigens, as has been described in the present application.

For completeness, the applicants provide the following comments in response to the Examiner's references to specific passages of Chien.

Page 5, lines 9-10 of Chien is not believed to describe antibodies or specific epitopes derived of the Core region 140-191 of HCV.

Page 9, lines 7-12 of Chien is understood to describe, at best, the putative existence of strains, isolates or subtypes of HCV different from HCV1, which is HCV type 1a as opposed to HCV type 3a.

Page 11, lines 26-33 of Chien is understood to define the term "a polypeptide derived from" however these cited sections, as well as the whole of Chien, is not believed to be related to HCV type 3a specific antigens and/or antibodies which specifically bind to the same.

Page 17, lines 31-32 and page 18, lines 1-2 of Chien is also not believed to disclose antibodies derived from vaccination of a mammal, as asserted by the Examiner. At most, this portion of Chien is understood to describe the term "individual";

Clarification is requested regarding the portion of Chien referred to by the Examiner as "col. 2, line 23" in the event a rejection based on Chien is maintained.

Page 27, lines 19-20 of Chien is understood to only broadly describes that an antibody can be polyclonal or monoclonal.

Clarification is requested as to where Chien specifically discloses conjugation of antibodies with a radioactive or enzymatic label in the event any rejection based on Chien is maintained.

Page 2, lines 22-27 and page 3, lines 21-29 of Chien only broadly refer to antibodies for use in a diagnostic kit or an immunoassay.

The claims are submitted to be patentable over Chien and withdrawal of the Section 102 rejection of claims 45-48 and 51-55 over the same is requested.

The Section 103 rejection of claims 49-50 over Chien in view of Bukh (U.S. Patent No. 5,514,539), is traversed. Reconsideration and withdrawal of the rejection are requested in view of the following distinguishing comments.

The Examiner's recognition that the independent claim 45, from which claims 49 and 50 depend, is patentable over the combined teaching of Chien and Bukh is acknowledged, with appreciation. The dependent claims 49 and 50 are similarly patentable over the combination of cited art.

Specifically, the deficiencies of Chien are noted above. The primary reference fails to suggest the claimed invention. The cited secondary reference fails to cure the

noted deficiencies of Chien. The claims are submitted to be patentable over Chien and Bukh and withdrawal of the Section 103 rejection of claims 49 and 50, which are each indirectly dependent on claim 45, is requested..

The claims are submitted to be in condition for allowance and a Notice to the effect is requested. The Examiner is requested to contact the undersigned in the event anything further is required in this regard.

Respectfully submitted,

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